

and, in each individual, is attained only in virtue of his own immediate experiences of his own teleological causal activity, but also mechanical causation cannot so much as be defined save negatively in terms of the better-known teleological causation—namely, as that kind of causation in which we can discover no signs or evidences of teleological activity. This statement might have been challenged with some plausibility fifty years ago, and may be questioned to-day by those who still think in terms of the science of that remote period. For at that date the mechanical philosophy, as it was called, was at the peak of its confident dogmatism (largely consisting of negations), based upon the belief that the atomistic mechanistic materialism which had come down from the pre-Socratic days was literally true. According to this way of thinking, mechanical causation consisted in the transmission of momentum from one hard impenetrable atom to another, all energy being of the nature of the momentum of masses made up of such atoms. It was this naive belief that made the law of conservation of energy seem to many a self-evident axiom, once it had been stated; for, under the assumptions of the system, it was identical with the law of conservation of momentum, and that, in turn, was supported by a wealth of common experience.

But now that this over-simple conception of the physical world and of the nature of mechanical causation has been of necessity repudiated, only the negative definition suggested above remains; a truth,

which was,
I think, first enunciated in my *Modern
Materialism and
Emergent Evolution*.

In all the perennial discussion about
mechanical and
teleological causation, the peculiar nature
of machines